1.What are the two values of the Boolean data type? How do you write them?

True and False.

a<b==True

a>b==False

Bool x=True

2. What are the three different types of Boolean operators?

AND ,OR ,NOT

3. Make a list of each Boolean operator's truth tables (i.e. every possible combination of Boolean values for the operator and what it evaluates ).

|  |  | AND | OR | NOT |
| --- | --- | --- | --- | --- |
| T | T | T | T | F |
| T | F | F | T | F |
| F | T | F | T | T |
| F | F | F | F | T |

4. What are the values of the following expressions?

(5 > 4) and (3 == 5) Ans:False

not (5 > 4) Ans:False

(5 > 4) or (3 == 5) Ans:True

not ((5 > 4) or (3 == 5)) Ans:False

(True and True) and (True == False) Ans:False

(not False) or (not True) Ans:True

5. What are the six comparison operators?

1.Less than<,2.Greater than >,3.Less than or equal to <=,4.Greater than >=,5.Equal to ==,6.Not to !=

6. How do you tell the difference between the equal to and assignment operators?Describe a condition and when you would use one.

Equal to is a comparison operator. Assignment operators will assign the value to the variable.

4==4 return true.

X=5 assignes 5 to X

7. Identify the three blocks in this code:

#Blocks 3

spam = 0

#Block2 starts

if spam == 10:

print('eggs')

#Block 1 starts

if spam > 5:

print('bacon')

else:

print('ham')

#block 1 ends

#Block 2 ends

print('spam')

print('spam')

#Block 3 ends

8. Write code that prints Hello if 1 is stored in spam, prints Howdy if 2 is stored in spam, and prints Greetings! if anything else is stored in spam.

switch(spam):

case 1:print(‘Hello’)

break

case 2:print(‘Howdy’)

break

default:print(‘Greetings’)

9.If your program is stuck in an endless loop, what keys will you press?

CTRL+C

10. How can you tell the difference between break and continue?

Break will terminate the iteration.

continue will change control back to the beginning of the loop, by rejecting the statement after it in the current iteration.

11. In a for loop, what is the difference between range(10), range(0, 10), and range(0, 10, 1)?

range(10):-doesn’t have specific starting initialized value,default value will be 0 and stepping value.

range(0,10): iteration starts from 0 which is specified as starting value and ranges to 9.

range(0,10,1):iteration starts from 0 which is specified as starting value and ranges to 9 step count 1.

12. Write a short program that prints the numbers 1 to 10 using a for loop. Then write an equivalent program that prints the numbers 1 to 10 using a while loop.

for i in range(1,11):

print(i)

i=1

while(i<11):

print(i)

i=i+1

13. If you had a function named bacon() inside a module named spam, how would you call it after importing spam?

spam.bacon()

spam = 0

{

if spam == 10:

print('eggs')

{

if spam > 5:

print('bacon')

else:

print('ham')

}

}

print('spam')

print('spam')